



Self Assessment Rubric

Rubrics for student self-assessment for Invention (Grades 6-8)

Invention is the process of developing unique products or processes that fulfill perceived needs.

A. *I identify a situation to improve or a need to which to respond.*

4. I identify a situation or a need in a clear and concise manner and in a way that reflects an in-depth understanding of the topic.
3. I identify a situation or a need in a way that reflects an understanding of the topic.
2. I identify a situation or a need in a way that reflects some confusion about the topic.
1. I identify a situation of a need in a way that reflects a lack of understanding about the topic; or makes little attempt to identify a situation or a need.

B. *I state a purpose or goal for the invention.*

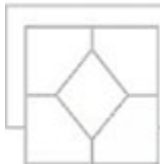
4. I state a purpose or goal that reflects an in-depth understanding of the situation or need and, thus, is very likely to produce an invention that will improve the situation.
3. I state a purpose of goal that reflects an understanding of the situation or need and, thus, is likely to produce an invention that will improve the situation.
2. I state a purpose or goal that reflects confusion about the situation or need and, thus, may not produce an invention that will improve the situation.
1. I state a purpose or goal that reflects a lack of understanding about the situation or need and, thus, will probably not produce an invention that will improve the situation.

C. *I identify specific standards or criteria for the invention.*

4. I identify a rigorous set of standards that will ensure a high-quality, worthwhile invention.
3. I identify an appropriate set of standards that will ensure a worthwhile invention.
2. I identify a set of standards that are not completely appropriate to the purposes of the invention or that may not ensure a worthwhile invention.
1. I identify a set of standards that are not appropriate to the purposes of the invention or that will not ensure a worthwhile invention.

D. *I make a model, sketch, or outline of the invention.*

4. I make a highly detailed, comprehensive model that clearly shows how the identified purpose and standards will be met.
3. I make a model that shows how the identified purpose and standards will be met.
2. I make a model that does not adequately show how the identified purpose and standards will be met.
1. I make little effort to make a model.



- E. *I work on developing an invention, looking for better ways to create it.*
4. I work on developing an invention in a way that reflects a commitment to find the best way to meet the identified purpose and standards.
 3. I work on developing an invention in a way that reflects a commitment to find a good way to meet identified purpose and standards.
 2. I work on developing an invention in a way that reflects a commitment to find any way to meet the identified purpose and standards; or I work on developing an invention that looks like it may not meet the identified purpose or standards.
 1. I work on developing an invention in a way that reflects a lack of commitment to find a way to accomplish the purpose and meet the identified standards; or I do little to develop an invention that accomplishes the purpose and meets the identified standards.
- F. *I continually revise and polish the process or product until it reaches a level of completeness consistent with the identified standards or criteria.*
4. I revise the process or product, with considerable attention to detail, until it meets or exceeds the identified standards or criteria. The process or product fulfills the purpose for which it was designed in a highly creative way.
 3. I revise the process or product until it meets the identified standards and purpose.
 2. I revise the process or product until it meets only some of the identified standards. The process or product may not fulfill the purpose for which it was designed.
 1. I finish revising the process or product before it has met the identified standards and purpose.

Adapted from McREL Institute